



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/599,309

03/05/2007

Kosuke Naito

G0126.0249

6752

32172 7590 12/10/2010
DICKSTEIN SHAPIRO LLP
1633 Broadway
NEW YORK, NY 10019

EXAMINER

PITT, BRYAN W

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

12/10/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,309	Applicant(s) NAITO ET AL.	
	Examiner Bryan Pitt	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received 08 September 2010 and has been entered. Claims 1-2 are pending.

Response to Arguments

2. Applicant's arguments with have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments filed 08 September 2010 respect to claim 1 have been fully considered but they are not persuasive. Applicant argues that Sawyer fails to teach increasing the charge discount rate of the user of the base station, as required by claim 1. The Examiner respectfully disagrees and asserts that when the surcharge is added to the preferential private (i.e. discount) rate assessed to the private subscriber, the rate assessed to the private subscriber is increased.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,516,193 to Salmela et al. in view of US 6,097,937 to Sawyer and US 5,577,101 to Bohm.

Regarding claim 1, Salmela teaches a mobile communication system comprising a base station and a terminal,

Art Unit: 2617

the base station being operable to transmit a downlink signal that includes a base station ID number indicating the identity of the base station and a specific use identification signal that indicates the base station is for specific use (i.e. Salmela teaches a base station which broadcasts its identifier; Col. 1 line 60 to Col. 2 line 8. The base station also broadcasts a signal informing a user that a special service, such as reduced tariff, is available Col. 1 lines 16-28), and

the terminal comprising a memory that stores a list of base station ID numbers of an accessible base station or an inaccessible base station, the list including every specific use identification signal (i.e. Salmela teaches that the mobile station stores a list of authorized base stations, including base stations for which a special service is available; Col. 3 lines 43-52), and

the terminal being operable to search whether or not the base station ID number in the received downlink signal is in the list of base station ID numbers and whether the specific use identification signal detected from the downlink signal is ON and performing communication with the base station only when access is permissible (i.e. Salmela teaches that the mobile station compares the broadcast base station identifier to the stored list of authorized base stations; Col. 10 lines 1-22. The mobile station is restricted to accessing only permitted cells; Col. 10 lines 23-32. The mobile station also detects whether the special service message is being broadcast; Col. 1 lines 16-29),

the mobile communication system further comprising a mobile communication network connected to the base station (i.e. Salmela teaches the base stations operating in a mobile communications network; Col. 1 lines 30-47),

wherein the mobile communication network comprises a discount rate calculation unit that calculates a charge discount of a user of the base station (i.e. Salmela teaches discounting the tariff when the user makes call from certain cells, therefore having a discount rate calculation unit; Col. 1 lines 16-29),

Salmela does not specifically teach further comprising, wherein the base station periodically sends the information to a database for storing the information indicating whether or not the specific use identification signal is sent, the mobile communication network comprises a database for storing the information, wherein the discount rate calculation unit calculates a charge discount rate of a user of the base station on the basis of whether the user has used information on the base station stored in the database, and wherein the discount rate calculation unit increases the charge discount rate of the user of the base station as the total time for sending the specific use identification signal becomes short or as the usage time or the amount of using packet of a general user other than the user of the base station becomes larger or that a resource of the base station is actively opened by the user of the base station to the general user when the user of the base station does not use the base station; however, at the time the invention was made the above limitation was well known in the art of communications.

Sawyer teaches a mobile communications system wherein a private microcell has an operating agreement with a public macrocell system thereby increasing the customer base of the public operator while providing wireless coverage to the private operator; see abstract. The private base stations presumably broadcast their cell IDs as

Art Unit: 2617

is well known in the art. The mobile communications network charges the private users at a preferential rate when they operate in the private cell and at a public rate when they operate in a public cell; Fig. 4. If the microcell is inoperable or degraded, the private users are charged at the preferential rate; Fig. 4. The private system periodically sends reports on its operating status to the MSC of the public system; Col. 4 line 52 to Col. 5 line 8. If the private base station fails (thus it does not broadcast), it can neither serve the private users nor report to the public system (Col. 2 lines 36-46, Col. 4 line 63 to Col. 5 line 8). The MSC places information regarding the private base station operating status in a charging record (i.e. database) send to a billing center and the billing center adjusts the tariff applied to users of the private microcell according to the microcell status; Col. 4 lines 3-24, Col. 4 line 52 to Col. 5 line 8. If the private cell is has failed (thus is not broadcasting), the operator will charge the private users at the preferential rate; however, if the private cell was congested (i.e. the usage time or amount of packet use of another user becomes larger) the private user is charges at the preferential rate plus a surcharge, therefore the discount rate is increased; Fig. 4, Col. 5 lines 57-65.

This allows the macrocell operator to give the private microcell subscribers preferential status in the public macrocell when the microcell is inoperable and charge an extra surcharge when the private microcell is congested; Col. 5 line 57 to Col. 6 line 9.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the mobile communications system of Salmela to include public and private cells in order to increase the customer base and to adjust tariffs according to the

Art Unit: 2617

status of private base stations as taught by Sawyer in order to give preferential status to private users while penalizing for excessive use of system resources.

Bohm teaches a telepoint system which uses a low-cost infrastructure comprising public telepoint base stations and private base stations (see abstract). Each of the private base stations has at least one cordless handset associated with it (Col. 2 lines 63-65). The private base station can include a private branch exchange wherein multiple handsets are associated with the private base station (Col. 3 lines 13-18). By including private base stations in the network, the need for public base stations is reduced and a network operator's costs are reduced, thereby also reducing subscribers' costs (Col. 2 lines 14-23). Each private base station belongs to a private subscriber who has top priority in the use of that private base station (Col. 3 lines 23-25, Col. 4 lines 1-10 and 13-19). If a private base station is not used by the owner, other subscribers of the telepoint system are able to use that station (Col. 3 lines 25-27). The owner of the private base station may be given a credit for use by the other subscriber to encourage the owner to make the private base station available to other subscribers (Col. 3 lines 56-60). By enabling other subscribers to use the private base stations, it is possible to increase the capacity and coverage of the telepoint system without increasing the amount of public base stations (Col. 2 lines 14-23, Col. 3 lines 19-22). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the mobile communications system of Salmela and Sawyer to open the private base stations to public use when not in use by the owner of the private base station as taught by Bohm in order to increase the capacity and coverage of the

Art Unit: 2617

telepoint system without increasing the amount of public base stations, thereby reducing costs to the network operator, and consequentially to the subscribers.

Regarding claim 2, the combination of Salmela, Sawyer, and Bohm teaches a mobile communication system according to claim 1, wherein the base station is operable to include the specific use identification signal to be included in a transmitted downlink common channel (i.e. Salmela teaches broadcasting the special service message, therefore transmitting on a downlink common channel; Col. 1 lines 16-29).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2617

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Pitt whose telephone number is (571) 270-7466. The examiner can normally be reached on Monday - Friday 9:00 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/B. P./
Examiner, Art Unit 2617